



ICRA Rating Feature

Rating Methodology for Hospitals

This rating methodology updates and supersedes ICRA's earlier methodology note on this subject, published in July 2018. While the revised version incorporates a few modifications, ICRA's overall approach to rating hospitals remains materially similar.

This rating methodology document explains ICRA's approach to analysing business and financial risks of hospitals. The objective of the rating methodology is to help issuers, investors and other interested market participants understand ICRA's approach in analysing the quantitative and qualitative risk characteristics that are likely to affect rating outcomes in the hospital sector. This methodology does not include an exhaustive list of all factors that are reflected in the ratings but would enable the reader to understand the rating considerations that are usually the most important.

Overview

The healthcare industry comprises hospitals, diagnostic service providers, pharmacies, health insurers, wellness centres, and medical equipment providers, among others. Hospitals are a vital part and the largest components of the domestic healthcare industry, encompassing a sizeable portion of the healthcare service value chain. They provide diagnostic and curative services (medical, nursing and related services) and in-patient facilities. The industry is highly fragmented, with more than 80% of the hospitals being standalone, owned and operated by medical professionals or trusts.

Hospitals are primarily classified on the basis of the breadth and depth of services rendered. Based on the range of services offered, hospitals can be identified as general and specialised hospitals¹, where general hospitals provide services across multiple specialties. Some hospitals are standalone while some are associated with the medical colleges.

Based on the range and depth of treatment provided, the key delivery formats are²:

- Primary-level hospital – very few specialties, mainly internal medicine, obstetrics and gynaecology, paediatrics, and general surgery, or just general practice; limited laboratory services available for general but not specialised pathological analysis
- Secondary-level hospital – 5 to 10 main clinical specialties; size ranges from 200 to 800 beds
- Tertiary-level hospitals – highly specialised staff and technical equipment - for example, cardiology, intensive care unit, and specialised imaging units; clinical services highly differentiated by function; could be undertaking education and research activities as well; size ranges from 300 to 1,500 beds

The Indian hospital industry has witnessed an increasing demand over the past few decades, driven by increasing penetration of medical services and health insurance, rising incidence of lifestyle diseases, growing disposable income, improving depth of services, gradual rise in the average age of population and surge in medical tourism. Notwithstanding the above, there have been challenges to performance, induced by regulatory changes, travel restrictions, pandemic (such as Covid-19) etc.

Despite healthy growth in both public and private sector investment in the healthcare industry in general and towards the setting up of hospitals, in particular India continues to suffer from low availability of bed capacity in per capita terms. Concerns such as high real estate costs, increasing equipment and operating costs, and shortage of medical professionals (leading to higher resource costs) have resulted in elongated payback

¹ Hospitals focussing on a single specialty (such as dentistry, fertility, eye care, etc)

² Source: WHO

periods. Additionally, the regulatory restrictions on the sector have adversely impacted the revenues as well as profits.

This rating methodology highlights the quantitative and qualitative risk factors that are likely to influence the rating outcomes for entities in the hospital industry, including, but not restricted to:

- **Industry Risk Assessment**
 - Regulatory risk
 - Competition intensity
- **Business Risk Assessment**
 - Scale
 - Diversification
 - Competitive position
 - Operating performance
 - Project risk
- **Event Risk**
- **Management Risk**
- **Financial Risk Assessment**
 - Profitability
 - Capitalisation and coverage indicators
 - Foreign currency risks
 - Tenure mismatches and liquidity
 - Accounting quality
 - Contingent liabilities and off-balance sheet exposures
 - Financial flexibility

- **Parent support**

Industry Risk Assessment

The Indian hospital industry is currently at a nascent stage compared to its counterparts in developed economies. India spends about 3.6% of its GDP on healthcare, which is significantly lower than the US (16.9%), Brazil (9.2%), South Africa (8.1%), Russia (5.3%), China (5%) and the global average of 8%. The country currently has 7 beds per 10,000 of the population compared to 38 beds per 10,000 in the US, 23 in China, 22 in Brazil and the global average of 27. A growing population, increasing life expectancy, rising incidence of non-communicable diseases related to lifestyles, growing per capita spend and health insurance cover are long-term positives for the sector. However, high real estate costs, increasing equipment & operating costs, shortage of medical professionals, high cost of medical equipment, and regulatory interventions have resulted in elongated payback periods.

Regulatory Risks

The operations of hospitals are governed by several state and Central and state Government laws. The pricing of multiple medical inputs is also controlled by the National Pharmaceutical Pricing Authority (NPPA), which has come up with restrictions on the pricing of cardiac stents and knee implants, which impacted the margins of all players in the supply chain. Key actions from regulators/Governments in the past have been in the form of penalties, caps on prices of products and services, and even the cancellation of licences for facilities or a particular division of the facility. Given the importance of healthcare to the citizens and the economy, the industry is continuously subject to interventions by state and Central Governments and other relevant regulatory authorities. ICRA assesses the impact of the same on an issuer's credit profile.

Competitive Intensity

The capital investment required for setting up a hospital is high, due to requirement for land and building in an easily accessible location and need for expensive medical equipment and infrastructure. The players range from a doctor-run facility catering to limited specialties and low complexity procedures to a large player catering to multi-specialties and higher complexity procedures. Due to high capex requirements and a multitude of approvals required to set up a hospital, the barriers to entry are considerable. In general, India remains under-penetrated in terms of hospital beds and the demand supply situation favours the players.

However, due to the large capital requirement and the long gestation period involved, the competitive intensity is moderate. Smaller players can enter and cater primarily to low complexity cases, which also requires relatively low capital investment while larger players enjoy a dominant position in the complex and high value cases.

Business Risk Assessment

Scale: ICRA views scale as an important parameter while assessing hospitals as it is a key driver of operating earnings (efficiencies in purchasing and better absorption of fixed overheads) and financial flexibility. A hospital with a large revenue base is more likely to have a diversified operational profile, thereby lending stability to operations. Further, large hospitals tend to exhibit stronger earnings profiles, providing necessary resources to expand and invest. Achieving healthy economies of scale is of considerable importance to the hospital industry, which is capital intensive and has a high operating leverage.

Revenue Growth

ICRA looks at the sustainability of revenue growth as one of the critical parameters, given the high capital intensity and high degree of operating leverage inherent to the business. The ability to consistently record revenue growth remains paramount for covering increasing inflationary pressure on operating costs and capital investments (equipment and real estate). Consistent revenue growth also indicates the hospital's ability to leverage its market standing and generate surplus earnings for capital investments, which are critical success factors. ICRA considers the low cyclicality associated with the hospital business favourably as demand for healthcare services is largely insulated from macroeconomic cycles. However, ICRA notes that a relatively lower insurance-payer mix (compared to developed countries) and intense competition leads to fluctuations in occupancies and realisations. A larger revenue base is viewed as a positive factor, as smaller hospitals tend to exhibit higher revenue volatility due to their dependence on a few specialties or consultants, indicating high concentration risk.

Diversification: Diversity in revenues reflects the quality of revenues in terms of sustainability and the associated profitability. Diversity is measured in terms of geographic/ asset diversity, depth & breadth of services rendered and the diversity of the patient pool. A large and well-diversified hospital generally carries a strong brand perception and is able to offer high-end value-added medical services, which augments profitability. However, in certain exigencies, in case the outpatient department (OPD) visits or elective procedures are curtailed, it may lead to volatility in revenues, even with a diversified revenue profile.

Geographic/Asset Diversification

Geographic concentration risk is measured through the assessment of the number of facilities operated across markets and the degree of cash flow concentration in the various facilities. Geographic diversification reduces the impact of regional regulations on the entity. However, over diversification with limited scale of operations could result in sub-optimal utilisation of resources and diffused management attention.

Specialty Diversification

Hospitals generate income from the out-patient department (OPD), the in-patient department (IPD), pharmacy and the laboratory services. ICRA looks at the diversity of services offered in terms of the range of specialties and the complexity of services. ICRA also looks at the contribution of revenues and profits from the major specialties to evaluate revenue concentration, if any, towards any particular specialty. A larger bouquet of specialties leads to improved scale and provides a larger scope for branding the hospital. The same also reduces revenue volatility arising from changes in disease patterns. Additionally, complex medical service offerings improve a hospital's pricing power and leads to better margins.

Diversity of Patient Pool

ICRA looks at the diversity of the patient pool, such as international patients, domestic out-of-pocket paying patients, insurance, Government (Central Government Health Scheme/Employees Health Scheme), etc. A diverse patient pool provides multiple levers to support revenues, enables maintaining a base occupancy level and helps mitigate concentration towards any particular segment. Non-institutional patients such as the out-of-pocket patients, insurance-paid patients and walk-in international patients provide hospitals with better pricing and collection cycles but these may or may not provide the requisite volumes to attain optimal occupancy. Moreover, business from medical tourism can also be impacted due to international travel

restrictions. On the other hand, institutional patients that are Government scheme-linked or institution-linked may provide lower pricing and longer payment cycles but may generate healthy volumes, which provide a cushion in absorbing the high fixed costs of running a facility.

Key Concentration Risk

Doctors and medical consultants play a major role in governing patient flow and bed utilisation in hospitals. ICRA looks at key person risk as an important criterion. Key parameters looked at by ICRA include the attrition levels (particularly among key consultants), qualification and experience, remuneration structure³, and succession planning policies. A variable remuneration structure makes the interest of the key consultants better aligned with that of the entity and it also reduces cost pressure in case of a fall in revenues/volumes.

While measuring all this, ICRA also looks at dependence on a key consultant as a concentration risk as reliance on some consultant(s) can possibly lead to a sharp dip in accruals, at least in the short term, in case of attrition. In assessing talent development and staffing policies, ICRA also favourably considers entities that have access to a captive source of talent pool through the operation of educational institutions, which also augments research capabilities.

Market Position: The market position is reflective of the issuer's scale, brand strength and track record, and aids in capturing a higher patient share. A strong market position also determines a hospital's growth prospects and its ability to attract and retain patients and consultants, which lends stability to earnings. Established market position for incumbents also provides comfort, particularly given the considerable outlay towards infrastructure, technology and marketing in the business.

A hospital with a large market share or with multi-discipline services enjoys better pricing power. The average revenue per occupied bed day (ARPOB) is the metric used by ICRA for understanding the pricing power and complexity of the specialty mix. Some of the above parameters are qualitatively incorporated into the assessment by ICRA, considering data constraints.

Certain facilities have been accredited by The National Accreditation Board for Hospitals & Healthcare Providers (NABH), under the purview of the Ministry of Commerce, Government of India, which provides guidelines and accreditation for running hospitals. This accreditation aids a hospital in empanelment with Government institutions, corporates and other nations and helps attract more patients, both domestic as well as international. It also helps it gain a better market position.

Operating Performance: ICRA looks at various operational parameters which reflect a hospital's ability to optimise asset utilisation and generate stable earnings over a period of time. These parameters also lend an insight into the management's business strategy and efficiency of operations. Managing brand equity and maintaining high quality infrastructure to attract both medical consultants and patients, rendering effective patient services and minimising bad debt concerns are critical success factors for efficient hospital operations.

For measuring asset utilisation, ICRA assesses parameters such as occupancy levels, average length of stay (ALOS), growth in inpatient admissions and outpatient volumes. In addition to the ARPOB, occupancy level, the ALOS and the ARPOB⁴, are key operating metrics and key drivers of performance.

Project Risk: Given the growing demand for healthcare services, hospitals are currently on an expansion drive in a bid to diversify and garner a larger share of under-penetrated markets. This is in addition to the

³ Key consultants typically tend to have higher revenue share as remuneration along with a minimum monthly guaranteed payment

⁴ Measures the hospital's pricing flexibility and reflects the depth of services rendered

bed capacity additions undertaken at existing facilities. This section briefly discusses the risks associated with such projects.

While analysing a hospital under construction, apart from the parentage and support from group entities (required to fund losses during the initial gestation period), ICRA analyses project-specific factors such as location, region-specific demand-supply dynamics, costs and sources of funding, and execution risks.

The location and market determine the project's ability to attract patients (i.e. occupancies and inpatient revenue per bed), which dictates the potential to generate cash flows. ICRA assesses the investment required per bed against other comparable projects as well as existing hospitals and compares the same to expected earnings from the unit to assess the debt-servicing ability. On account of long gestation periods, the mode of financing of the project influences the credit risk associated with the project (including tenure and interest rate related risks). Finally, the experience and ability of the management to ensure the timely execution of projects within the budgeted cost levels play a key role in determining the viability and returns from the project. Expansion may also be done through the operations & maintenance (O&M) and leasing models for hospitals, which are considered to be an asset-light route for growth. However, ICRA evaluates the same on a case-to-case basis and the potential revenues from the managed/leased facilities are to be weighed along with the additional costs involved under this model, mainly in the form of payments to the asset owner.

Event Risk

ICRA also recognises the possibility of events such as substantial debt-funded capital expenditure, unrelated diversification, mergers and acquisitions, business restructuring, asset sales and spin-offs, capital restructuring, malpractice/reputation related risks, and regulatory interventions and litigations, which could have a material impact on the credit profile of an issuer.

Management Risk

All debt ratings necessarily incorporate an assessment of the quality of the entity's management, as well as the strengths/weaknesses arising from the entity's being part of a group. Also, of importance is the issuer's likely cash outflow arising from the possible need to support other group entities, in case the entity is among the stronger ones within the group. Usually, a detailed discussion is held with the entity's management to understand its business objectives, plans and strategies, and views on the past performance, besides the outlook on the industry in which it operates. Some of the other points assessed are:

- Experience of the promoter/management in the line of business concerned
- Commitment of the promoter/management to the line of business concerned
- Attitude of the promoter/management to risk taking and containment
- The entity's policies on leveraging, interest risks and currency risks
- The entity's plans on new projects, acquisitions, expansion, etc
- Strength of other companies belonging to the same group as the entity
- The group's ability and willingness to support the entity through measures such as capital infusion, if required

ICRA gives adequate weightage to various qualitative aspects resulting from management meetings. A detailed discussion is held with the management to understand their business strategy, growth plans as well as risk appetite, which may have an impact on the issuer's future performance. Periodic interactions with the management also help ICRA estimate the possibility of the management's tendency to deviate from its business philosophy in times of stress. The management's ability to meet their committed performance and ensure stability in operations are key to the rating.

Financial Risk Assessment

ICRA ascertains the adequacy of future cash flows to meet repayment obligations and investment requirements (measured by ratios like Debt Service Coverage Ratio, Net Cash Accruals to Total Debt and Retained Cash Flows to Total Debt) besides considering the sensitivity of cash flows to various scenarios.

ICRA projects the financial performance of hospitals, taking into account the expected operating performance based on various business-related factors and also the estimated capex and investment requirements, as well as upcoming debt obligations to study the impact on revenue growth and profitability, cash flows, leverage and debt protection indicators. ICRA also looks at the funding requirements of an issuer and the funding options available to it.

Profitability: ICRA uses EBITDA, an important metric to measure profits for the hospital industry, as EBITDA is capital-structure agnostic, and reflective of the extent of value addition. Hospitals, in general, tend to operate on relatively higher EBITDA margins (operating profit margins) in the healthcare value chain, reflecting the high fixed capital intensity and value addition. Also, ICRA evaluates stability in operating margins over a period of time, as it measures the entity's ability to withstand competitive pressure, apart from event-specific risks. ICRA also measures the return on capital employed (RoCE) as diversified and mature hospitals exhibit relatively stable levels of return.

Maturity Profile of the Asset(s)

Hospitals have a high operating leverage due to significant fixed costs in the operating structure. Newly built facilities take time to ramp up and face pressure on profitability during the initial years of operations. On the other hand, a mature facility will have a stable and moderately growing revenue profile with an established track record of operations. A hospital's performance is viewed in tandem with its vintage. While a recent expansion undertaken by a hospital might result in lower margins on account of the high gestation period, ICRA also looks at the unit-wise profitability, specifically for facilities, which contribute to a sizeable portion of the overall earnings.

Capitalisation and Coverage Indicators: Hospitals have significant re-investment requirements for expansion and upgradation of facilities. ICRA places considerable emphasis on measuring the adequacy of cash flows (after meeting operating and investment needs) to meet debt repayment obligations and the adequacy of the surplus to meet the investment requirements.

The debt profile of hospitals is typically skewed towards long-term debt on account of the capital intensity, with the cash and carry nature of the business limiting working capital requirements. ICRA analyses the indebtedness, including features such as interest rate, tenure, and structure.

Leverage ratios are an indicator of the financial flexibility of a hospital in raising funds from alternative avenues, particularly when operational accruals are under pressure. Such flexibility is reflected in an entity's Total Debt-to-EBITDA and Free Cash Flows-to-Debt ratios. A low leverage ratio indicates adequate cushion in terms of raising funds primarily from external sources (debt borrowings) for meeting funding requirements and is a credit positive.

The interest coverage indicator reflects the issuer's ability to fund the cost of external borrowings after meeting all operating expenditure. The ratio indicates the entity's ability to absorb any decline in operational earnings arising from various business risks, without impairing its ability to meet the interest payments.

Foreign Currency Risks: Foreign currency risks for the industry primarily arise on account of the import of equipment and technology, operations outside India and foreign currency-denominated debt. While assessing the exposure of an issuer to foreign currency risks, ICRA focusses on the impact of adverse movement in foreign exchange rates on the cost structures, profits and net cash outflows, besides evaluating the hedging mechanisms. This apart, currency movements impact demand through medical tourism, which is gaining prominence.

Tenure Mismatches and Liquidity: The hospital industry remains highly dependent on the banking system to meet its funding requirements, with limited access to capital markets, except for a few large corporate entities. Significant dependence on short-term borrowings to meet increasing investment in infrastructure exposes hospitals to funding mismatches and refinancing risks, especially during periods of tight liquidity. The ratings factor in the existence of adequate buffers of liquid assets and bank lines to meet any short-term obligations and the extent to which the issuer could be impacted by interest rate movements on borrowed funds. ICRA assesses the management's approach and track record of maintaining sufficient liquidity and flexibility to access longer tenure funding to absorb any reasonable stress on cash flows.

Working capital requirement: ICRA measures debtor, inventory, and payable days as well as the working capital intensity of operations as a percentage of an entity's turnover, while looking at the trend in the working capital movement and comparing these ratios with its peers to analyse the efficiency in working capital management. The working capital cycle in general is getting longer for the sector as the share of cash paying patients is reducing and that of insurance-paid patients is rising, leading to longer receivable cycle. The Central Government, state overnments, armed forces and the PSUs operate various healthcare schemes for their employees (along with their dependents) and empanelment with these public-sector schemes enables a hospital in attaining reasonable volumes. Sans the empanelment, a hospital misses out on business from a large number of beneficiaries enrolled under these schemes. However, the payment cycle of these public-sector schemes is long and in some instances in the past has become significantly stretched, which leads to cash flow mismatches, high working capital intensity of operations and in some cases, stretched liquidity position. Thus, ICRA incorporates working capital intensity of operations, while assessing the credit risk profile of an entity.

Accounting Quality: ICRA reviews the accounting policies, notes to accounts, and auditor's comments. Any deviation from the generally accepted accounting practices is noted and the entity's financial statements are adjusted to reflect the impact of such deviations.

Contingent Liabilities and Off-balance Sheet Exposures: ICRA evaluates the likelihood of devolvement of contingent liabilities/off-balance sheet exposures and assesses the financial implications of the same on the rated entity.

Financial Flexibility: The entity's financial flexibility, as reflected by unencumbered cash flows or assets and the nature of its relationship with banks, financial institutions and other intermediaries, is assessed. The comfort derived from a strong parentage also helps in improving its financial flexibility.

Parent Support

While the credit rating of an entity is a function of its standalone credit profile, in certain cases, the entity's credit quality can also be driven by the relationship with its parent or the promoter group (henceforth referred to as the parent). If the parent's credit profile is relatively stronger than the rated entity, ICRA assesses the ability and the likelihood of the parent extending extraordinary support to the entity. Support here means financial support from the parent expected to be available to the entity in the form of loans, equity, extended credit period, advances etc. in times of credit or liquidity stress on the entity. Support here does not mean operational support in the form of new business opportunities, technology-sharing, distribution network sharing and so on as these aspects are factored in the standalone credit profile assessment itself. It may be noted that promoters, in their individual capacity, or private equity firms/ other financial investors, are generally not treated as parents for assessing the likelihood of extraordinary financial support coming in. If the parent's credit profile is relatively weaker than the rated entity, the entity's rating may be lower than what its standalone credit profile assessment would have merited, given the possibility that the entity may at some point of time have to extend financial support to its weaker parent, possibly to the detriment of its own credit profile.

Summing Up

While evaluating the credit risk profile of hospital companies, ICRA considers the size of its operations, the diversity of offerings, the profile of the patient pool and trend in key operating metrics. ICRA also considers the dependence on key consultants, the competitive positioning of the entity as well as expansion plans and associated project risks, if any. ICRA's financial risk analysis for hospital companies focusses on, among other things, the trend in profitability, the extent of leverage, ability to service debts, and financial flexibility. Lastly, ICRA appropriately factors in various company-specific qualitative aspects based on discussions with the management, including the business strategy, growth plans as well as risk appetite, which may have an impact on the issuer's future performance.

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